

Competition, Flexibility and Working Hours

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1. Background to the problem

Throughout Europe, the trend towards greater flexibility of working hours appears to be unstoppable. It is primarily determined by two factors which are redefining the traditional notion of normal working hours. On the one hand, the amount of shift working, night-time working and weekend working is increasing. The concept of a 24-hour company is gaining ground (Gross/Dasko 1999). On the other hand, flexible working time patterns are replacing the hitherto widely-accepted model of normal working time which provides for a more even distribution of working hours. In particular, time accounts are being used as a vehicle for a comprehensive change of work patterns. Depending on demand, they allow unequal allocation of daily or weekly working hours.

Both types of flexible working time arrangement reflect the efforts of companies to exploit new working patterns in order to reduce costs and improve their competitive edge by applying two factors: work and capital. Working time has become an important competitive tool. Rationalisation objectives are the principal driving force behind these radical changes. On the other hand, less importance is attached to levels of employment, although these are an inevitable consequence of improved competitiveness. Greater consideration of employment policy objectives could certainly be allied with flexible working hours as the ultimate goal of rationalisation and competitiveness. A direct employment policy approach offers the combined benefits of more flexible and shorter working hours. This approach is based on the principle of replacing extra payments for exceptional working hours – including overtime or night-time working or shift working – by an equivalent period of free time, thus reducing the actual working hours and creating a greater demand for labour. The simple logic of this strategy is to redefine the

universally-accepted maxim that 'time is money'. In its reciprocal form – 'money is time' – it points the way to fuller employment. In principle, this approach is in line with the recommendations of the White Paper by the EC Commission (European Commission 1993), which also puts forward a strong case for more flexible and shorter working hours.

Before I embark on a more detailed examination of this theory of an employment policy combining flexible and, in turn, reduced working hours, I would like to begin by outlining the relationship between flexibility of working hours and competitiveness. In this context, a few brief references to the current state of progress towards more flexible working hours in Europe will have to suffice. Due to time constraints, the highly important question of the effects of flexible working hours on the lifestyle of employees and their families will also have to be set aside for the moment.

2. Economic aspects of flexible time management

In terms of extended plant utilisation periods and variable distribution patterns, flexible working hours offer significant cost benefits and improved competitiveness.

(1) Extended working periods based on shift working, night-time working and weekend working

The introduction of shift working, night-time working and weekend working extends the utilisation period of the capital investment, as well as the time available for providing services and for exchanging data, whereby the need to maintain up-to-date information means that simultaneous processing (the 'one-off' principle) is not always possible. The main stimuli for extending plant utilisation periods and, in turn, the amount of shift working, night-time working and weekend working are increased levels of capital investment in manufacturing as well as in some parts of the service sector, accompanied by simultaneous cooperation across time zones

in the wake of globalisation of the economy and progressive tertiary industrialisation.

In terms of competitiveness, in the manufacturing sector as well as in parts of the management and service sectors, the length of the plant utilisation periods is of significance to the extent that, under existing depreciation conditions, it affects the level of fixed capital costs for each unit produced (interest and depreciation). The longer the average machine operating times, the more products that can be manufactured using the existing capital investment or, alternatively, the lower the capital investment required in order to manufacture a given number of products. This relationship is all the more apparent as the manufacturing process becomes increasingly capital-intensive. Extended plant utilisation periods allow more rapid amortisation of the invested capital. This effect is particularly beneficial in cases where the capital is already obsolete and before it is exhausted (moral obsolescence). Finally, in terms of working hours, electricity charges are a major factor, particularly in the case of energy-intensive manufacturing processes in the field of materials processing (the chemical, oil refining and metal-producing industries). During off-peak periods at night and at weekends, the power supply companies normally offer considerable tariff reductions, which offset and may even exceed the supplementary payments to the workforce incurred by extended working hours (Seifert 1991). Against this background, the question of working hours is an important factor for this type of plant.

In the service sector, other calculations come into consideration. In the case of services provided by human beings (as against machines), simultaneous working procedures (the 'one-off' principle) results in round-the-clock support, with working hours to match. This is particularly relevant to the healthcare sector, (which is expanding rapidly in many countries) as well as the hotel and catering industry. In the financial and capital markets, with their links around the globe, simultaneous presence across the time zones requires that they are also manned outside normal working hours. The same applies to the transfer and processing of production-related data from the design and construction sectors or even sales offices which are geographically remote from production and marketing centres.

In Europe, these mechanisms have resulted in a steady rise in the number of employees who are also working (or are required to work) at night or at weekends¹. The most dramatic increase has been in Sunday working. In just five years – from 1992 to 1997 – the growth was 2.6 percent. During the same period, over a quarter (27.8%) of all employees (either full- or part-time) opted to work on Sundays. There were even more examples of Saturday working. Over half (50.1%) of the entire workforce in the Member States of the EU work on Saturdays, if not regularly then at least now and again. Saturday is assuming the mantle of a normal working day. In comparison, at 14.6%, the average rise in night-time working throughout the EU is less significant and in recent years it has begun to slow down. Thus, the change in working patterns is mainly reflected in the weekend. This has lost its cultural role, both for individuals and for society as a whole, as a period of general rest and recreation (Rinderspacher 1999).

This somewhat insidious erosion of the work-free weekend has progressed at different rates in the different countries and economic sectors. While night-time working and weekend working in Great Britain are far more widespread than in any other EU Member State, Sunday working, particularly in southern European countries such as Portugal and Spain, plays a much less important role. In general, throughout Europe both night-time working and weekend working in the service sector are more widely practised than in the manufacturing industry. In the light of the differences from country to country in terms of the quantitative significance of night-time and weekend working, the opportunities for introducing a strategy of time-based supplementary payments are limited.

¹ Single-shift working has been excluded from these observations because, in comparison with night-time and weekend working, it is less demanding and less socially and commercially disruptive.

(2) Varying working hours by means of time accounts

The most dramatic changes to working hours are a result of the introduction of time accounts (Seifert 1998). They are revolutionising the earlier principle of more schematic working hours based on a rigid working pattern. While the traditional normal working hours only allow variations from a virtually standardised daily or weekly working period as exceptions in the form of extra hours and short-time working, the introduction of time accounts means that variable allocation of an individual normal working period, based on collective bargaining agreements or statutory regulations, is becoming standard practice. The normal working period simply represents an average objective to be attained within a given space of time. Annual working time models restrict it to 12 months, while other models specify shorter – or even longer – compensation periods; in some exceptional cases, they dispense with restrictions altogether. Variations from the normal working period are entered in time accounts as either time credits or time debits.

As far as companies are concerned, the changeover to a variable working system controlled by time accounts offers considerable benefits in terms of productivity and costs.

- (1) The working cycle can be more accurately synchronised with (consistent or erratic) fluctuations in the demand for goods and services. Less productive, relatively idle periods can be avoided.
- (2) A production process which is closely synchronised with the cycles of demand also reduces warehousing costs.
- (3) The daily/weekly working period can be extended without the need to make overtime payments.
- (4) If the working period is extended in stages, this makes it possible to comply with short delivery deadlines and to respond quickly to spontaneous market movements.

- (5) Time accounts can be used to bridge any gaps between incoming orders and to avoid the cost of redundancies and subsequent re-hiring of labour or the expense of short-time working.

These cost and productivity benefits greatly increase the competitiveness of the company. There remains the question of the effects on employment levels. The direction and scope of the effects on employment levels are dependent on the extent to which the work-saving rationalisation effects brought about by time accounts can be offset by simultaneous stimulation of growth. In the final analysis, this is an empirical question which will be clarified in the context of further research work into the operational relationships of time accounts.

3. The potential effects of flexible working hours on employment policy

The potential effects of flexible working hours on employment policy can be inferred from the fact that supplementary payments, on the one hand, for night-time and weekend working and, on the other hand, for overtime working are converted into equivalent periods of free time with the aid of time accounts. What is meant by a strategy of time-based supplementary payments and what are the likely effects on employment levels?

- (1) Time off in exchange for night-time working and weekend working

The potential effects on employment policy of a changeover from supplementary payments for night-time working and weekend working is dependent on (1) the number of working hours involved, (2) on the amount of the supplementary payments and (3) on the willingness of companies and employees to accept this strategy. Since the available data on these variables only permit an incomplete assessment of the situation in individual EU countries, the extent of the possible effects on employment levels can only be demonstrated by using Federal Germany as an example.

In Germany, where the average supplementary payment for regular night-time working is 25% and 62% for Sunday working, the effect on employment levels could be equivalent to at least 700,000 to 800,000 extra jobs. The number of employees could increase by 2.5%, accompanied by a fall of 20% in the number of unemployed persons. For the purpose of this simple calculation, the possible effects on productivity and growth have been disregarded. Even if only half this figure were to be realised, it would represent a major step forward along the road to full employment. Since, on average, the amount of night-time and Sunday working in the other Member States of the EU is higher than in Germany, the effects on employment levels of a deliberate policy of compensation in the form of time off are likely to be even more dramatic. As shown by successful commercial examples in various EU countries, the principle of time-based supplementary payments is a thoroughly practical proposition; all that is required is its introduction on a national scale.

Employment policy is not the only reason for promoting a strategy of time-based supplementary payments. The majority of employees regard night-time working and

weekend working as less than ideal and they would like to either reduce these hours or dispense with this type of regime altogether. The extent to which the duration and frequency of these working hours are regarded as unsocial can only be determined by welfare analyses. The adverse effects on health (as a result of night-time working) are diminishing, as are the social disadvantages associated with family and public life. The unpopular night-time and weekend working would lose some of its stigma.

(2) Reduction of overtime by virtue of time accounts

Time accounts represent a functional equivalent to overtime working and can act as an effective substitute. Not only that, they are more cost-effective. Overtime is normally paid at the rate of 25% and 50%. Many companies in different countries throughout Europe are already using time accounts with great success in order to convert definitive overtime hours into transitory overtime hours. This conversion

reduces the effective working time and, in return, it stimulates demand for additional jobs. Overall, however, the potential effects on employment which could be mobilised by substituting overtime payments by time accounts are far from being exploited to the full. Nearly two thirds (62%) of the workforce in EU countries work overtime (Bielenski 2000) and every day almost one third (29%) of them work longer hours than stipulated in their contracts of employment.

As far as Federal Germany is concerned, current estimates show that reductions in the amount of overtime working, which can easily be replaced by time accounts, would trigger an additional effect on employment levels of the order of 400,000 to 600,000 jobs (Groß et al. 1999). Employment could rise by between 1.3% and 1.9% and unemployment could fall by 10% to 15%. The effect on employment in the other European countries is likely to be similar.

From the point of view of employees, the prospect of a reduction in overtime working is attractive. Firstly, as demonstrated by the results of a study commissioned by the European Foundation (Bielenski 2000), a large number of employees already have the option of

exchanging overtime payments for time off at a later date. Secondly, a significant majority of employees who had accrued overtime payments but did not have the option of exchanging them for time off expressed great interest in this type of time compensation scheme.

Nonetheless, it cannot be automatically assumed that overtime working will be converted into additional jobs. The first prerequisite is that time accounts should be introduced on a national scale, accompanied by corresponding information and advice campaigns. As a second stage, compensation in the form of time off for extra work, on the basis of time accounts, should be organised within specific time limits.

4. Conclusions

The employment-based application of flexible working patterns holds the prospect of a 'win-win' situation. Companies are able to make significant reductions in employment and capital costs by virtue of extended plant utilisation periods and variable work allocation schemes, while achieving gains in productivity. Employees profit from working hours which are more in keeping with their own preferences. The unemployed are able to find work. Last, but not least, the state derives benefit from the reduced numbers of unemployed persons which, in turn, relieves the load on the exchequer and allows greater room for manoeuvre, either for more public investment or for lowering the contributions to social insurance schemes. This would relieve companies of the burden of labour costs and increase the disposable income of their employees. Against this background, there are no convincing reasons why flexibility and curtailment of working hours should not be combined with a successful industrial employment strategy.

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Shift Working, Night-time Working and Weekend Working in the EU
1997
(in %)

Country	Shift working			Night-time working			Saturday working			Sunday working		
	Economy Overall	Manufacturing sector	Service sector	Economy overall	Manufacturing sector	Service sector	Economy overall	Manufacturing sector	Service sector	Economy overall	Manufacturing sector	Service sector
EU	12.7	15.2	14.1	14.8	15.2	14.8	50.1	36.0	48.8	27.6	16.3	28.7
AT	19.2	17.5	21.1	18.0	17.5	17.2	46.8	32.1	47.0	27.1	13.7	26.0
BE	15.8	15.7	15.6	14.2	15.7	12.5	39.6	19.1	37.4	24.9	12.4	24.1
DE	11.6	12.9	11.8	12.4	12.9	12.3	40.6	30.2	40.1	22.5	12.0	23.5
DK	8.6	12.5	9.0	14.5	12.5	14.5	46.3	28.9	45.4	37.1	22.6	38.2
ES	6.5	10.3	8.3	10.5	10.3	12.3	42.3	18.3	43.3	19.1	7.2	21.0
FI	19.3	21.2	23.3	19.5	21.2	18.0	40.4	27.4	37.0	28.7	20.3	25.3
FR	7.8	17.4	6.0	16.4	17.4	14.0	53.4	37.0	53.5	29.2	14.9	29.1
GR	11.4	9.7	19.9	14.3	9.7	19.6	64.4	32.2	46.2	32.5	9.4	28.0
IE	13.7	17.8	16.9	20.5	17.6	18.9	50.7	48.4	51.6	35.3	18.6	31.7
IT	17.8	11.8	24.3	13.1	11.8	15.9	61.6	39.6	62.7	22.3	7.7	24.6
LU	11.0	33.3	6.7	12.9	33.3	9.2	42.4	48.2	36.3	22.3	31.1	18.8
NL	8.1	14.8	8.4	11.0	14.0	11.7	41.8	32.3	41.5	24.5	15.4	25.5
PT	6.5	1.6	9.8	0.8	1.0	0.8	37.8	17.0	30.8	16.2	4.8	16.2
SE	23.0	15.4	27.6	13.0	15.4	12.4	30.9	23.6	40.0	35.2	21.1	35.8
UK	17.0	24.4	18.4	22.6	24.4	20.8	61.4	50.8	58.2	42.4	42.4	40.7

Source: Eurostat, own calculations

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